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Marshall Space Flight Center

July 8, 1998

All-Hands Meeting Highlights Safety, Planning and Workforce Challenges

by Mike Wright

cting Marshall Center Director Carolyn Griner conducted the first of what she termed an "all-hands" meeting last week for Center employees.

Griner spoke to employees in Morris Auditorium and to employees watching over center-wide television. Griner said she used the term "all-hands" because the meeting "concerns all of us" and should be more than a status briefing. "There are things which we feel like all of you need to know and understand." Griner also said she appreciated employee feedback concerning such meetings. "If there are things that I have said that bother you or things that you are intrigued with or things you want to talk to me about, get me on the phone or send me an e-mail."

One of Griner's key topics at the

employee meeting June 30 referred to Marshall's role in a new NASA-wide safety initiative. (See article below, right.)

Planning for the future and workforce challenges were among the topics covered at last week's meeting. Griner also explained how Marshall management reviews proposals for new work at the Center using the Program Management Council. In addition, the meeting included an update on the future of Project Light, and a tribute to United Space Boosters Incorporated. The event concluded with the presentation of lengthof-service awards to Marshall employees.

Planning

The Strategic Plan and Marshall's Implementation Plan are prime drivers related to Marshall's goals and planning for the future, Griner said. "The big



NASA photo by Adeline Byford

Acting Marshall Center Director Carolyn Griner speaks to employees during an allhands meeting June 30 in Morris Auditorium.

element that is different this year from last year is the GPRA. It's the Government Performance and Results Act. It's an act passed by Congress with the intent of being able to measure the productivity and the effectiveness of the government across the board. It's not just a NASA thing."

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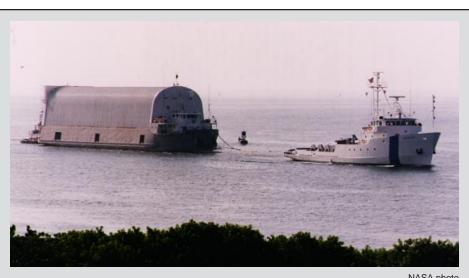
Marshall to Participate In New NASA-Wide **Safety Initiative**

by Mike Wright

he Marshall Center is participating in a new NASA-wide safety initiative, Acting Center Director Carolyn Griner told employees as part of last week's allhands meeting.

"The agency has taken a very strong position on safety for many, many years," she said. The safety of the NASA astronauts, the safety of the NASA workforce, and the safety of NASA spacecraft have long been top priorities. NASA Administrator Dan Goldin has directed NASA to mirror a world-class safety program. "There is a benchmark

See Safety Initiative on page 5



'Freedom Star' Tows Barge Containing New Space Shuttle Fuel Tank

A barge containing the third Marshall-managed Space Shuttle super lightweight external tank is towed into Port Canaveral, Fla., by "Freedom Star," one of NASA's two solid rocket booster recovery ships. This tank will be used to launch the orbiter Discovery on mission STS-95 in October. The improved tank was developed to increase Shuttle performance for the International Space Station assembly flights.

Around Marshall

Tap Into the Ability to Teach Yourself

The Employee Development Technology Center (EDTeC) at Marshall offers a variety of self-study courses, including foreign languages, application software, and professional/personal development. These self-study courses are available on audio, video or computer-based media. More information about Marshall's EDTeC may be found at the following Web site:

http://inside/EDTeC/ or call the EDTeC at 544-8291.

What's New in EDTeC?

Computer Training Courses For Macintosh Users

- ✓ After Effects 3.1
- ✓ Illustrator 7.0
- ✓ Director 6.0
- ✓ Mac OS 8
- ✓ Excel 5.0
- ✓ Photoshop 4.0
- ✓ FastTrack Schedule 4.0
- ✓ Powerpoint 4.0
- ✓ Filemaker Pro 4.0
- ✓ Word 6.0

NASA Chair Position Available at the Naval Postgraduate School in Monterey, Calif.

Qualified applicants are currently being sought for the Michael J. Smith Professor of Space Systems at the Naval Postgraduate School in Monterey, Calif. This chair professorship, created in 1995, honors Space Shuttle Challenger Pilot and Naval Postgraduate School alumnus Michael J. Smith. The chair is jointly sponsored by the Naval Postgraduate School and NASA. This one- to two-year assignment begins Sept. 1. For more information about this chair professorship, contact Mack Blackman at 544-7509.

Employees Should Not Disturb Wildlife Nesting Areas Around Marshall Center

The Environmental Health Office at Marshall requests that employees avoid areas where significant wildlife nesting materials, excreta or other animal remains are found. Various forms of wildlife such as rodent and pigeons carry pathogens. Exposure to these microorganisms, such as viruses and bacteria, can cause diseases in humans. If signs of wildlife infestation are encountered, call Marshall's Environmental Health Office at 544-2390.

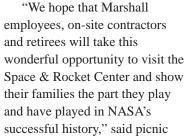
Marshall Picnic Set for Aug. 22 at The U.S. Space & Rocket Center

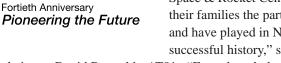
by Renee Reynolds Picnic Publicity

In celebration of NASA's 40th anniversary, the 1998 Marshall Center Picnic is being held 4-9 p.m., Saturday, Aug. 22. at the U.S. Space & Rocket Center.

In addition to free admission to the museum, attendees will have the opportunity to view an IMAX theater presentation, ride

Space Shot and other attractions, and view a fireworks display.





chairman David Reynolds, AT01. "Even though the picnic site has changed, we know the fun and fellowship will remain the same."

The picnic's vice chairman of services and support is Bob Armstrong, PS01. Tammy Rowan, CO60, is the picnic's vice chairwoman of administration. More information about the Marshall picnic will soon be available on the Intranet and in upcoming issues of the Marshall Star.

Improved NASA Space Suit Technology Gives Virginia Boy His First Day in the Sun

Like an astronaut setting foot on a new world, a 6-year-old Virginia Beach, Va., boy can explore Earth during daylight for the first time, thanks to new NASA space suit technology.

On April 19, Mikie Walker became the first American child to receive a modified "space suit" that protects him from the Sun's ultraviolet rays and other light sources. Mikie has porphryia, a genetic disorder that causes extreme and potentially dangerous sunlight sensitivity that can result in chronic skin inflammation, blistering, inflammation of nerves, abdominal pain and other disturbances. For some children with light sensitivity disorders, even a 40-watt light bulb can be dangerous.

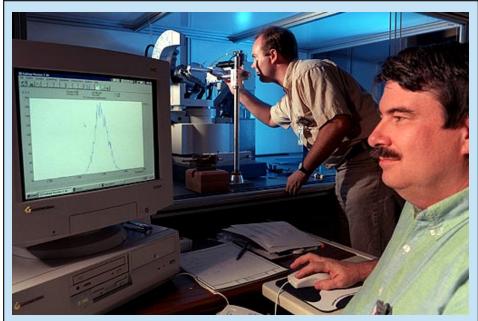
"Mikie's new favorite outdoor activities include playing in dirt and rolling on the lawn," his mother Angela Walker said. "He enjoys this so much that, at the end of the day, he resembles a soil-encrusted Apollo moonwalker."

NASA's Johnson Space Center in Houston, Texas, Office of Technology Transfer and Commercialization offered the suit to Mikie through an agreement with the not-for-profit Hypohidrotic Ectodermal Dysplasia (HED) and Related Disorders Foundation, Hampton, Va.

See NASA Space Suit on page 3

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NASA photo by Dennis Olive

Making Molecules Crystal Clear at Marshall

Scientists Marc Pusey, right, of Marshall's Space Sciences Laboratory, and Eddie Snell of the National Research Council, prepare to map the microstructure of a crystalized biological molecule. The research team is making the first use of standard X-ray sources to complete the tiny measurements in a laboratory environment, instead of traveling to a more complex and busy synchrotron X-ray facility. The first use of this new technique is important to researchers growing crystals to design new disease-fighting drugs and vaccines and building the knowledge of how biological molecules function.

NASA Space Suit

Continued from page 2

"It's amazing to think that NASA astronauts having walked on the Moon means a child now can play in the sunlight," said Sarah Moody, founder and president of the HED Foundation.

According to HED Foundation's Moody, who presented the NASA suit to the Walker family, a giggly Mikie couldn't wait to don his "space suit" and explore the outdoor world of his home planet in daylight. The family headed for a local lake and, also for the first time, Mikie could look at the scenery out the van's windows. Previously, the passenger windows of any vehicle in which Mikie rode had to be covered completely to prevent exposure to sunlight.

More information about UV protective suits for children with applicable disorders may be found at the following Web site: http://www.microclimate.com/hed/ or contact the HED Foundation at P.O. Box 9421, Hampton, VA, 23670, phone (757) 826-0065.

X-33 Thermal Protection System Tests Completed Successfully

ASA's F-15B Aerodynamic Flight Facility aircraft has successfully completed flight testing of Thermal Protection System (TPS) materials for the X-33 Advanced Technology Demonstrator at NASA's Dryden Flight Research Center, Edwards, Calif.

Six flights were flown to test the durability of the TPS materials at flight velocities above the speed of sound, providing data to the X-33 demonstrator program team. The X-33 is scheduled to begin test flights in July 1999.

"This is an excellent example of all the testing the X-33 program is performing on the challenging technologies we need for a reusable launch vehicle," said Dan Dumbacher, NASA's X-33 deputy program manager.

The X-33 program is under the Space Transportation Programs Office at Marshall.

Thermal protection systems are used on spacecraft to protect them during flight, primarily as a "heat shield" during reentry into Earth's atmosphere. Though the X-33 is a sub-orbital technology demonstrator for an eventual commercially developed and operated single-stage-to-orbit launch system, the X-33 will encounter an extreme heating environment similar to what such a vehicle will encounter during orbital space flight and atmospheric reentry.

The F-15B reached an altitude of 36,000 feet and a top speed of Mach 1.4 during the flight series. No damage or signs of wear from high speed or maneuvering were apparent on any of the TPS materials, providing further confidence to the X-33 team in the ability of the materials to successfully protect the X-33 and follow-on vehicles in the harsh environment in which they will fly.

"With the F-15B we were able to accomplish the X-33 TPS durability flights in a timely and cost-effective manner," said Roy Bryant, Dryden's F-15B project manager. The X-33 TPS team is very happy with the data obtained during these

tests. A satisfied customer indicates a job well done by the F-15 project team."

The TPS material samples include metallic Inconel tiles, soft Advanced Flexible Reusable Surface Insulation tiles and sealing materials. They were flown attached to the forward-left side position of the F-15B's Flight Test Fixture II, a device attached underneath the aircraft to carry experiments.

In-flight video from the aircraft's onboard video system and chase aircraft photo and video cameras documented the condition of the TPS materials during flights.

"I appreciated the expeditious manner in which this flight project was accomplished," said Gary Trippensee, Dryden's X-33 project manager. "The combined B.F. Goodrich Co., Richfield, Ohio; NASA's Ames Research Center, Moffett Field, Calif.; and Dryden test team provided valuable X-33 TPS flight qualification data efficiently and timely," Trippensee said.

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All-Hands Meeting

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Griner said. The act applies to all government agencies.

Griner reported that she had formed a Vision-to-Action Team at Marshall to examine the requirements of the GPRA and its relationship to other planning documents such as the Strategic Plan and Marshall Implementation Plan. "We looked at the goals as they had been defined in our earlier plans and they were primarily directed toward meeting the goals of the enterprises. That's fine. We have to do that. The enterprises are our customers." But, she added, the team discovered elements that needed to be considered beyond those associated with the enterprises. "We came together to try to understand what should the goals of the Marshall Space Flight Center be both technically, institutionally and programatically. How do we put all of those together?"

Griner outlined five goals that the Vision-to-Action team had developed.

- Lead the research and development of space transportation technologies and systems that support our customers needs.
- Lead the NASA microgravity research program and develop and maintain capabilities required to meet national research objectives.
- Develop and maintain NASA's preeminence in space propulsion to enable the exploration and development of space.
- Develop and maintain excellence in space optics fabrication, metrology and testing that supports and advances the NASA science program.
- Enhance and sustain a highly skilled, diverse and motivated workforce in a creative and productive environment to support the development of cutting-edge systems and technologies. Safety also will be included as an element in the fifth goal.

The goals will be communicated to employees through the Marshall Implementation Plan and will be posted on Marshall's home page on the Internet. "I would encourage you within your own work unit to discuss those goals. Try to understand how they relate to what you do and how you do it," Griner said.

Workforce Challenges

"The future is bright... But we certainly have workforce challenges that effect us," Griner said. She said that downsizing has left its mark on the workforce. "We basically have more work than we have people to do the work," she said.

Griner said the major issue the Center faces is skills shortages. "What we are talking about here is a changing and challenging environment, and we have to look at strategies for how to meet it and adapt. We have got to be prepared to change both organizationally and personally."

Griner encouraged employees to focus on "our mission areas and our centers of excellence. I think we've got to look hard at

not doing non-government work ... We've got to make specific make/buy decisions. I know that's hard. We have a lot of in-house work. We'd like more and more and more of it. But those decisions have to be focused around the Center's future and our capabilities, and we just can't do it all."

Griner told employees, "Its no secret that we are downsizing. Some folks think things are getting worse. I don't think they are getting worse. They are different. The environment is very different. The work we have to do is very different although we tend to think of it as being more of the same. It isn't. I think it is growing in new and challenging directions. These are the kind of things this Center has always responded to in the most positive sense. It's not going to be easy, but it is essential to be able to deal with it. We have a solid future. There is no doubt about that. The assignments to the Marshall Space Flight Center are absolutely critical and absolutely in line to attain not just the Agency's goals but the country's goals. And, you shouldn't have

any doubt about that. If we fail, the country loses. I think that is something we take as a burden, but I think it is one we should carry gladly into this future."

Griner also commented on what she called "the competitive" environment within NASA. "This is not an environment in which we go to Headquarters and people hand you money. That's been changed a long, long time. Science has always been competitive. It's always been peer reviewed. They are always looking for the best of the best, always looking for innovation. Our science folks here at the

Center have been extremely successful at that. We're not as much used to that environment in some of the engineering technology and development work we do. But we better get used to it because that's the way it is."

Marshall managers and employees should also be aware of an increased call for synergy between aeronautics and space transportation, Griner said. "We have to get past the cultural barriers that have been put in place across this Agency that say we don't really work with those aero centers. The aeronautics centers are, Griner said, "partners in space transportation."

Griner also stressed the importance of leadership at every level. "It's not just at the top. I think every individual at this Center has leadership in their own area and in their own work unit, and they must exercise that. Don't expect people to hand you the answers, you have to take leadership and determine what the answers are and ask the hard questions. That's how we'll continue to get better." She also called upon employees to look for opportunities to improve the processes they are involved in. "Folks who do the business are the ones most knowledgeable about the better way."

Program Management Council

Griner also explained how Marshall management focuses on See All-Hands Meeting page 5

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— Carolyn Griner

Acting Marshall Center director

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program and project decisions. "That occurs through what is called the Marshall Program Management Councils (PMC). We have three at the Center, a Center Program Management Council which deals with all the work that's done here at the Center and two lead Center Program Management Councils, one for microgravity and one for space transportation." Because the latter two Program Management Councils involve lead center responsibilities, they also include Marshall's partners and customers at other field centers.

The Marshall PMC that relates to work done at the Center is chartered as

Upcoming Events

'Federal Retirement Systems' Topic of Seminar July 22; Reservation Deadline is Fri.

The Employee & Organizational Development Office at Marshall will sponsor a seminar "Federal Employees Retirement System (FERS) or Civil Service Retirement System (CSRS), Which is Right For You" 8 a.m.-noon, Wednesday, July 22. Through lecture and discussion, this four-hour seminar will compare information about both Federal retirement systems allowing each employee to select the system which is best for them. Discussion topics include:

- Retirement Eligibility
- Length of Service and High Three
- Allowance for Sick Leave
- Transferring From CSRS to FERS
- Disability Retirement
- Death of an Employee
- Survivor Benefits
- COLA's
- Computation of the Annuities for Both Systems
- Special Retirement Supplements for FERS
- Reduction in Annuity for Being Under Age

Seminar enrollment deadline is 4:30 p.m. Friday. For more information, contact Francee Logston via e-mail.

part of Marshall's ISO 9000 process. The PMC is basically an integrated management team chaired by the center director or the deputy center director, Griner said. "We try to make the best use of the resources we have at the Center, and make sure there is challenging work at this Center. Again, I think there is more (work) than we can actually physically do."

She said the PMC considers several factors when it reviews proposals for new work at the Center. "Top of the list is technical merit and innovative ideas. It's not just do it because you have been doing it for years." The council also considers technical expertise at the Center. "Do we actually have the capability in terms of tools, facilities and personnel?" Griner explained. She said any new proposed work must be compatible with the Center's roles and missions assignments. "We're not going to go off and delve in

somebody else's area." In addition, the PMC considers how Marshall expertise might be applied to the work. "We look at partnering (with other Centers)," Griner added. "We look for well thought-out plans," she said. The PMC examines proposals for realistic schedules and realistic resources.

Project Light Update/Tribute to USBI

Last week's meeting also included a report on the accomplishments and future of Project Light at the Marshall Center.

The report was presented by Larry Lechner from Marshall's Technology Transfer Office.

In addition, John Chapman, deputy manager of the Marshall Solid Rocket Booster Project Office, thanked United Space Boosters Incorporated for its years of service as a Marshall Center prime contractor. On July 1, USBI began operations as a subcontractor to United Space Alliance.

Safety Initiative

Continued from page 1

that the Administrator has established and that benchmark is the Dupont Corporation. Dupont has got a fantastic safety record," Griner said.

Griner noted Dupont's role in training other organizations,

and she invited Ron Mize, Marshall's director of Industrial Safety to the podium to explain how Marshall will initiate the Dupont approach. "Generally speaking, we have a very good personnel safety record at Marshall," Mize said. "But we

should never be content with what we have. Dan Goldin has established a goal for NASA to be number one in safety in the world, and I want Marshall to lead NASA in meeting that goal."

Mize said that Dupont representatives

will work directly with Marshall personnel. "We're bringing in representatives from Dupont to work with us. This will be done on a one-on-one basis. Dupont senior management will work with our senior management. Their

line managers will work with our line managers, and so on down the management chain."

The program will also include seminars, training sessions and other activities. Metrics for judging success will be established within the framework of ISO 9000.

Griner said she

was impressed by the level of training and accountability associated with the Dupont program. "They have found a correlation between how an individual thinks about safety at home and how they think about safety at work."

"Dan Goldin has established a goal for NASA to be number one in safety in the world, and I want Marshall to lead NASA in meeting that goal."

— Ron Mize

Marshall's director of Industrial Safety

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Employee Ads

Miscellaneous

- ★ 20" Reel mower, 2hp, self-propelled w/bagger, \$250. 837-0085
- ★ Ryan commercial weed eater, \$45. 837-0085
- ★ Office chair, cloth, w/arms, \$50. 837-0085
- ★ Three 20-pound, refillable propane tanks, \$25 each. 852-3501
- ★ Windsurfer Mistral Pandera complete w/sail, \$200. 232-1940
- ★ Peugeot bike, adult 10-spd., \$75. 539-0263
- ★ PowerBook 3400c, 200/80, active matrix, 2.1GB hard drive, 6x CD-ROM, 33.6K modem, \$2,000. 881-5389
- ★ 19" Color TV, \$100; VCR \$50; cellular phone, \$15; exercise bike with electronics, \$30. 851-6661
- ★ Cardioglide exercise rider, \$40. 971-9710
- ★ Goldwin AVDP XL driver, 10 degree loft, ultralite graphite reg. shaft, \$185. 971-9710
- ★ Callaway clone golf clubs, 3 through SW, Grafalloy Prolite ultralite graphite shafts, \$200. 337-8630
- ★ Leather loveseat, less than 1 year old, \$550 o.b.o. after 5:30 p.m. 876-1225 or 247-5500
- ★ Ruger 77/22RS, .22LR, Simmons 22mag 3-9x scope, leather sling, hard case, \$375. 722-0882
- ★ Freezer, 13.3 cu. ft. upright, 54.5" x 28.5", \$200. 533-0278
- ★ Girls bedroom suite w/poster bed, dresser, mirror, white, \$300. 883-5168

Vehicles

- ★ 1995 Nissan Maxima SE, leather, sunroof, CD, ABS, keyless entry, power seat, security, \$15,900. 539-0094
- ★ 1986 Corvette, red/red, 98K miles, \$9,500. 533-0038
- ★ Acura Legend LS auto, leather interior, sunroof, CD, \$8,490. 880-7204
- ★ 1995 Grand Voyager, V6, dual air, 58K miles, \$9,900. 837-0085
- ★ 1993 Toyota Camry XLE, V6, 65K miles, leather, sunroof, \$13,000. 534-3777
- ★ 1991 Cadillac Deville, blue, \$6,000. 230-0722

Wanted

★ Encyclopedia Britannica year books 1990 and later. 881-5389

Free

★ Young, neutered tabby cat, affectionate, litter trained, shots, Huntsville license. 837-2386 ★ Miniature long-eared rabbit, female, four months old, gray/white. (256) 971-1414

Carpool

★ Decatur to Marshall and back, Monday, Tuesday, Thursday, Friday, non-smoker, flexible hours. 351-6855

Center Announcements

- Motivation Techniques Seminar Marshall's Employee and Organizational Development Office will host a live, interactive seminar featuring Bill Byham, author of the bestseller "ZAPP!! The Lightning of Empowerment" noon-2 p.m. Thursday in Bldg. 4200, room G-13. Discussions will be held on efficient and profitable methods to motivate employees and ignite their entrepreneurial spirit. Contact: Kimberly Davis, 544-3343.
- ◆ AFGE The next monthly meeting for the AGFE-Local 3434 Union is set for 11:30 a.m.noon July 14 in Bldg. 4200, room 815.
- ► NARFE The National Association of Retired Federal Employees (NARFE), Chapter 443 will meet at 9:30 a.m. Saturday, July 11, at the Senior Center on Drake Avenue. Huntsville. Mimi Bynum will present a program on therapy dogs. The dogs, trained to provide companionship and comfort to patients in medical facilities, will be at the meeting. Contact: 837-0382 or 881-3168
- Engineering Seminars The Societies of American Military Engineers, American Professional Engineers and American Civil Engineers will host four seminars 5-9 p.m. July 21 at the Tom Bevill Center, rooms 268-269. Contact: Gerri Rogers, 955-6600 or Pat Allen, 876-2423
- MARS Tennis Tournament The MARS Tennis Club is holding an open mixed doubles tournament starting at 8:30 a.m. Saturday. Club members can have non-club member partners. Contact: Mike Moore, 544-7176 or Bill Baker, 544-6686
- Lunch & Learn Marshall's Employee Assistance Program will host a Lunch & Learn seminar noon-12:45 p.m. Thursday, July 16 in Bldg. 4200 Morris Auditorium. The topic "Planning for Retirement," including the new Roth IRA and recent tax law changes, will be presented by Billy G. Brown. Brown, a certified financial planner, will allow time for questions and discussion. All Marshall employees, on-site contractors and family members are invited. Contact: Gail Ralls, 4-3268

- Ski Week 1999 The 8th annual NASA Ski Week will be hosted at Jackson Hole, Wyo., Jan. 30 Feb 6, 1999. Over 250 skiers from seven NASA centers are expected at this 3,000-acre resort in western Wyoming. All Marshall employees, on-site contractors, retirees and family members are eligible to participate. Contact: 544-6568 or e-mail: Thomas.S.Dollman@msfc.nasa.gov
- ► NASA Exchange The NASA Exchange will be accepting bids until Friday on four Airdyne bikes. Bikes may be viewed 8 a.m.-4 p.m. Monday- Friday in Bldg. 4752. Contact: Teri Hassell, 544-3337
- Sharps Containers Available Sharps containers are available from Marshall's Medical Center in Bldg. 4249 to any on-site civil service employee or contractor who needs one. Contact: Medical Center, 544-2390
- MARS Flag Football The MARS Flag Football League will meet at 11 a.m. Thursday, July 16 in Bldg. 4752, all purpose room. Anyone interested in playing or entering a team in the men's or women's league should attend. All Marshall employees, family members, on-site contractors and specified off-site contractors are invited. Submission deadline for rosters and liability releases is Aug. 14 and team fees are due Aug. 21. The season will begin Aug. 24. Contact: Scott Tillery, 544-8651.

Job Opportunities

CPP 98-68-PL, Supv. AST, Mission Operations Integration, GS-801-15, S&E, Mission Operations Laboratory, Operations Integration Office. Closes July 10.

CPP 98-85-JB, Community Relations
Specialist, GS-301-12, Customer & Employee
Relations Directorate, Government &
Community Relations Office. Closes July 13.
CPP 98-86-JB, Support Services Supervisor,
GS-342-15, Center Operations, Center
Operations Management Office. Closes July 14.
CPP 98-89-PL, AST, Mission Operations
Integration, GS-801-14, S&E, Mission
Operations Laboratory, Operations Integration
Office. Closes July 20.

CPP 98-90-DC, AST, Aerospace Flight Systems, GS-861-14 (2 vacancies), Microgravity Research Program Office, MSFC, Microgravity Science & Applications Project Office. Closes July 9.

CPP 98-91-JB, Strategic Planning Specialist, GS-301-13, Customer & Employee Relations Directorate, Internal Relations & Communications Office. Closes July 9.

MARSHALL STAR

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